

# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO	).	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,654		09/29/2004	Eugene P. McLoughlin	68.0129CNT-DIV1	5653
35204	7590	03/10/2005		EXAMINER	
SCHLUM	IBERGE!	R RESERVOIR CO	DANG, HOANG C		
14910 AIR	LINE RO	AD		<u> </u>	
P.O. BOX 1590				ART UNIT	PAPER NUMBER
ROSHARON, TX 77583-1590				3672	
				DATE MAILED, 02/10/200	

Please find below and/or attached an Office communication concerning this application or proceeding.

į	SY	Application No.	Applicant(s)				
	Office Action Summers	10/711,654	MCLOUGHLIN ET AL.				
$\psi$	Office Action Summary	Examiner	Art Unit				
		Hoang Dang	3672				
 Period for	The MAILING DATE of this communication ap Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)∏ R	desponsive to communication(s) filed on						
<i>'</i> —		—· is action is non-final.					
′=	, <del></del>		secution as to the merits is				
· · · · · · · · · · · · · · · · · · ·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	n of Claims						
		_					
	Claim(s) <u>1-42</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
· ·	Claim(s) is/are allowed.						
	Claim(s) <u>1-42</u> is/are rejected.						
	Claim(s) is/are objected to.						
8)[_] C	Claim(s) are subject to restriction and	or election requirement.					
Applicatio	n Papers						
9)□ TI	he specification is objected to by the Examir	ner.					
•	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
•	der 35 U.S.C. § 119						
·	•	en neigrity under 25 LLC C & 110/a	) (d) or (f)				
•	cknowledgment is made of a claim for foreig	in phonty under 35 0.5.C. § 119(a)	)-(a) or (i).				
,	All b) Some * c) None of:	ata baya basa sasaiyad					
·	. Certified copies of the priority docume		Care NIa				
	Certified copies of the priority docume						
3	Copies of the certified copies of the pri		ed in this National Stage				
	application from the International Bure						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s	•	<b>(~)</b>					
1) Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da					
	or Drattsperson's Patent Drawing Review (P10-948) ation Disclosure Statement(s) (PTO-1449 or PTO/SB/0		Patent Application (PTO-152)				
-	No(s)/Mail Date	6) Other:					

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#### DETAILED ACTION

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 5, 14-17, 20, 22, 31-35, 38 and 41 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Conrad (US 2,988,323) (see "outer housing" 14, "inner housing" 10, "radial flow passages" 34-35, "primary seat" 31 or/and 51-52 and "secondary seat" 54.
- 3. Claims 1-3, 13-15, 17-22, 31-34, 36, 41 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong (US 5,263,683).

The claimed structure reads exactly on the reference's structure when members (18), (46), (54 and 58), (32) and (34 or 28a/28b) of Wong are considered as "outer housing", "inner housing", "radial flow passages", "primary seat" and "secondary seat", respectively, as recited.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 4, 5, 7-13, 21, 23-29, 36, 37, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conrad '323.

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Conrad discloses the invention as claimed except that the "secondary seat" and "primary seat" are made of "rubber" and steel" respectively whereas the claims call for "plastic", "PEEK", "carbide", "tungsten-carbide", "hardened steel", "ceramic", "vapor deposition diamond" or "polycrystalline diamond". However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the material as claimed since such materials are known and used in the art because of their relatively high wear resistance and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

6. Claims 4, 23 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong '683.

Wong discloses the invention as claimed except for the use of "PEEK" for the seals. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use PEEK in Wong as claimed since such a material is known and used in the art because it can withstand substantial pressure loading and harsh downhole conditions. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

7. Claims 6 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong '683 in view of Upchurch (US 4,403,659).

Wong discloses the invention as claimed except for the use of an orifice insert in the radial flow passage. However, it would have been obvious to one of ordinary skill in the art at

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Upchurch '659 (see insert 31 in figure 2E).

the time the invention was made to provide Wong with an insert as claimed because it is well known to provide lateral flow passage with an insert to minimize erosion as evidenced by

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Conrad '323 or Wong '683 in view of Mohn (US 5,447,201).

Conrad or Wong discloses the invention as claimed except for the use of an electric submersible pumping system. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tubing of Conrad '323 or Wong '683 with an electric submersible pump as claimed because it is well known in the art to provide such a pump to enhance the production of formation fluid as evidenced by Mohn (see column 5, lines 33-38).

### Conclusion

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 703-308-2149. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent .

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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